

설근부암의 수술적 접근방법과 재건방법의 선택

최은창 · 고윤우 · 박현중 · 임정택 · 김세현 · 김광문

Choice of Surgical Approaches and Method of Reconstruction for Base of Tongue Cancer

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ABSTRACT

Background and Objectives : There are various surgical approaches for resection of base of tongue cancer, but reports on indications of each approach are lacking. **Patients and Methods** : From 1993 to 1999, surgically treated patients with base of tongue cancer were reviewed retrospectively. Fourteen patients were included in this study. All but one were previously untreated. Approaches used to remove the tongue base lesions were as follows : lateral pharyngotomy, transhyoid pharyngotomy, mandibular swing approach with or without supraglottic partial laryngectomy (SPL), extended supraglottic partial laryngectomy (ESPL), lingual release or lingual-mandibular release technique, and pull through approach. Free flap or myocutaneous flap were used for the reconstruction of surgical defect in five patients. **Results** : Surgical resection margin was positive in five patients. In these, the lateral wall of oropharynx was the most frequent site of positive margin. All patients, except one total laryngectomy, could do well without tracheostoma and oral feeding was possible in all cases. **Conclusions** : In small lateral tumor, transpharyngeal resection was a good alternative for vigorous transmandibular resection. In case of tumor with vallecular or supraglottic involvement, supraglottic partial laryngectomy with or without mandibular swing was needed. For total glossectomy, lip and mandible could be spared with pull through or lingual release approach. Even though we could choose any surgical approach with very wide surgical field, we needed more generous safety margin for this notorious tongue base cancer. (Korean J Otolaryngol 2001;44:305-11)

KEY WORDS : Base of tongue cancer · Surgical approach · Reconstruction.

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T1 3 T2 4 7 T4

1993 1999

가 가

14 , , . 1

57 40 68 가 1

. 1 13 가 2

(mucoepidermoid 5,400 cGy 6,300 cGy

carcinoma) (acinic cell carcinoma)

1

1997 AJCC

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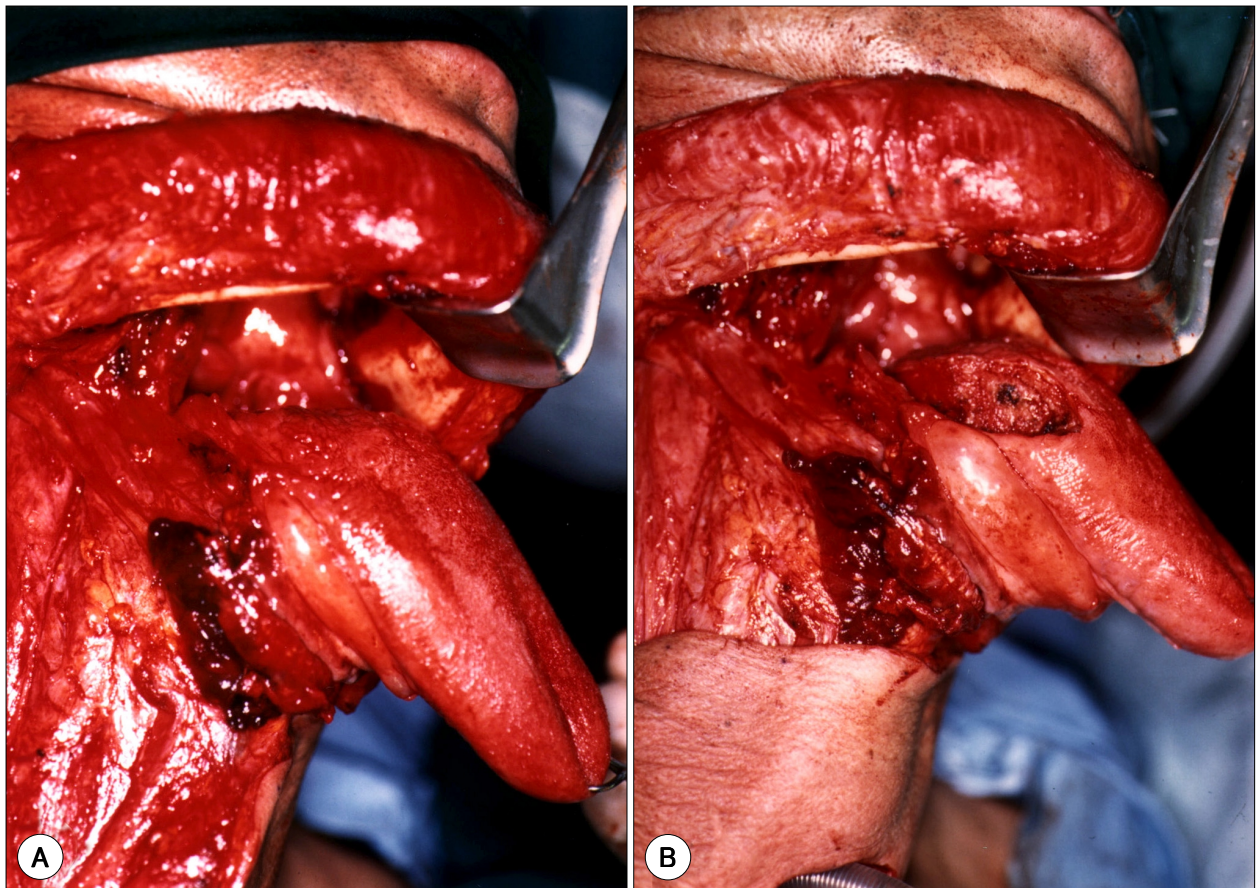


Fig 1. Intraoperative view of ligular release technique for base of tongue cancer. A : Delivering entire tongue through neck. Note wide exposure of the entire oral tongue and base of tongue. B : Note that wide excision of the tumor under excellent surgical view is possible.

1 2 (Table 1).

14

(lateral pharyngotomy) 2 , (trans -
hyoid pharyngotomy) 1 , (lingual or
lingualmandibular release) 1 (Fig. 1), pullthrough
1 , (extended supraglottic
partial laryngectomy) 1 8 2
5 1 , 1

(Table 1).

N+ 1 3 1 3

N0 2 8 14 5 (Table 1).

가 8 5 2 1 (extended rad -
ical neck dissection) 4
가 N0 4 5
(supraomohyoid neck dissection) 2 (carcinoma in situ)

Table 1. Profiles of base of tongue patients

	Name	Sex/Age	pTNM	Extension	Midline	Operation name	Approach	Reconst.	Neck dissection	Tx. modality
1		/57	T2N2bM0	-	-	Wide excision	PMmn	Primary	RND	SR
2		/57	T2N2bM0	T, V	cross	Wide excision	PMmn	PMMC	ERND	SR
3		/61	T1N0M0	T, FOM	-	Wide excision	PMmn	FFF	SOND	RS
4		/58	T4N0M0	E, V	cross	SPL, Excision	PMmn	Primary	SOND	SR
5		/57	T4N1M0	E, V	-	SPL, Excision	PMmn	Primary	RND	SR
6		/58	T4N0M0	V	cross	SPL, Excision	PMmn	Primary	SOND, SOND	SR
7		/55	T4N2cM0	T, P, V	-	SPL, Excision	PMmn	FFF	ERND, SOND	SR
8		/43	T4N2cM0	T, E, V, EF, PS	cross	SPL T/L/G	PMmn	PMMC	ERND, ERND	SR
9		/64	T4N2cM0	-	cross	T/G	Pull through	RAFF	SOND, SOND	SR
10		/62	T2N0M0	-	cross	Excision	TH pharyngo.	none	-	S
11		/40	T2N0M0	-	-	Excision	Lat. pharyngo.	none	-	S
12		/67	T1N1M0	-	-	Excision	Lat. pharyngo.	none	RND	SR
13		/68	T4N2cM0	V	cross	Extended SPL	-	Primary	RND, LND	SR
14		/57	T1N2aM1	-	-	Wide excision	Ligual release	Primary, STSG	RND	SR

pTNM : pathologic TNM stage, Recon. : reconstruction, Tx. : treatment, T : tonsil, V : vallecula, FOM : floor of mouth, P : lateral oropharyngeal wall, E : epiglottis, AEF : aryepiglottic fold, PS : piriform sinus, PMmn : paramedian mandibulotomy, TH pharyngo. : transhyoid pharyngotomy, Lat. pharyngo. : lateral pharyngotomy, SPL : supraglottic partial laryngectomy, T/L/G : total laryngoglossectomy, T/G : total glossectomy, PMMC : pectoralis major myocutaneous flap, FFF : forearm free flap, RAFF : rectus abdominis free flap, STSG : split thickness skin graft, RND : radical neck dissection, ERND : extended radical neck dissection, SOND : supraomohyoid neck dissection, LND : lateral neck dissection, S : surgery, R : radiotherapy

Table 2. Profiles of base of tongue cancer patients

	Pathology	Margin	Decann.(d)	Oral diet(d)	Complication	Cx. treatment	Recurrence	F/U(m)	Outcome
1	SCC	-	11	11	-	-	locoregion.	14	DOD
2	SCC	+	54	47	flap necrosis, fistula	flap removal	local	15	DOD
3	SCC	+	37	34	infection	I & D	-	30	NED
4	SCC	+	17	14	-	-	-	27	NED
5	SCC	-	37	32	infection	conservative	-	29	NED
6	SCC	-	60	56	-	-	-	25	NED
7	SCC	-	27	95	swallowing diff.	PEG	-	12	NED
8	SCC	+	-	56	-	-	locoregion.	6	DOD
9	SCC	+	86	24	-	-	-	13	NED
10	MEC	-	11	10	-	-	-	20	NED
11	acinic cell ca.	-	9	8	-	-	-	10	NED
12	SCC	-	9	7	-	-	-	15	NED
13	SCC	-	120	30	fistula	conservative	-	4	NED
14	SCC	-	24	22	fistula	primary closure	-	27	NED

Decann. : decannulation day, Cx. : complication, F/U : follow-up period, SCC : squamous cell carcinoma, MEC : mucoepidermoid carcinoma, I&D : incision and drainage, PEG : percutaneous endoscopic gastrostomy, locoregion. : locoregional, DOD : die of disease, NED : no evidence of disease

3 (invasive carcinoma) 가 .

(Table 2). 7 95 .

가 2 가 2 10 가

가 1 가 11

4 가 가 30

1 . 가 3 22

2 , 30 , 47 가 . 가

6 , 15

3 13, 27, 30 14 95 가

(Table 1 and 2). (Table 2).

2

1 가 가

가 2 2 가

(Table 1 and 2).

1 가

가 가 9 120 .

120 가

2

2 , ,

1 (Table 2).

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4 3

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6)

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가

가

push back flap

11)

가 가

11)

가

3

가

가

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1

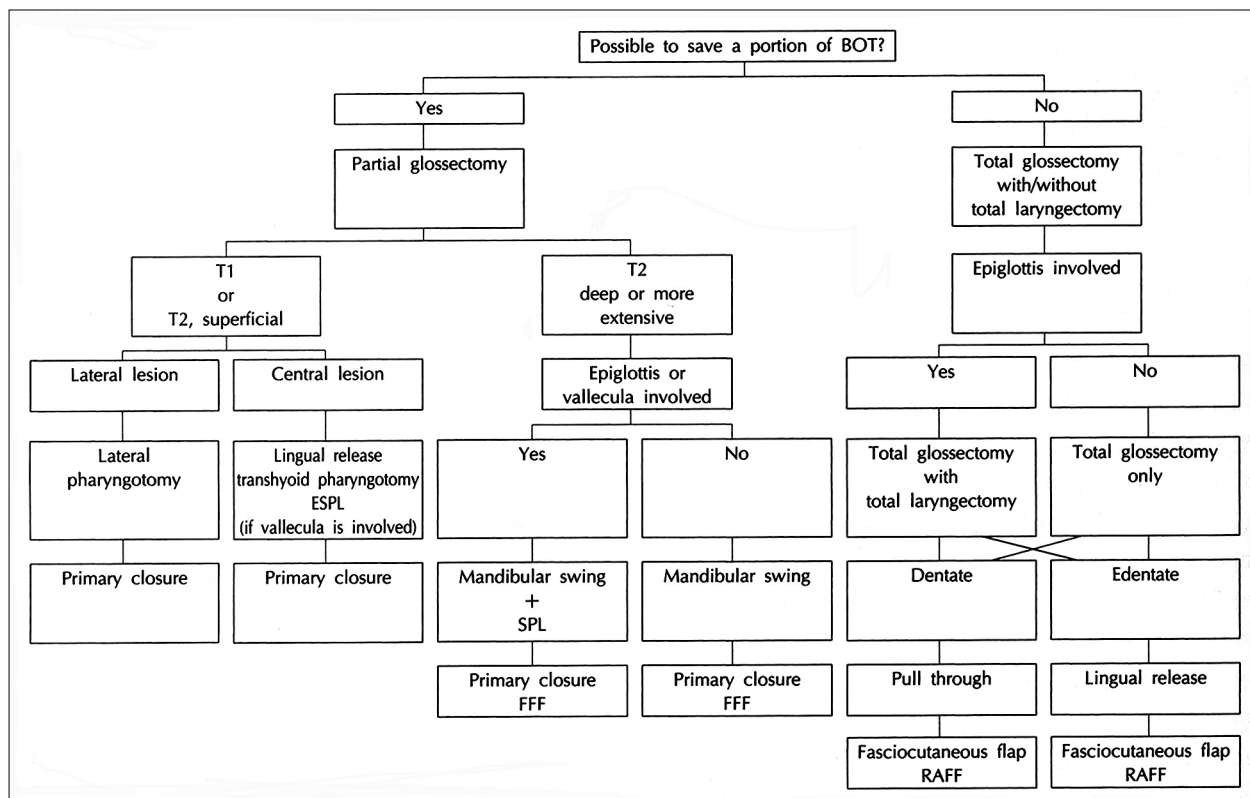


Fig. 2. Severance protocol. There are various surgical approaches and reconstruction for base of tongue cancer. BOT : base of tongue, SPL : supraglottic partial laryngectomy, ESPL : extended supraglottic partial laryngectomy, FFF : forearm free flap, RAFF : rectus abdominis free flap

가 (lateral arm)
(lateral thigh)
(fasciocutaneous flap)

1)12 - 14)

가

15)

(Fig. 2).

()

pull through

가

가

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